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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,216	12/29/2000	Ashok N. Rudrapatna	2925-0346P	6981
30594	7590	07/26/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			MOORE, IAN N	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,216

Applicant(s)

RUDRAPATNA, ASHOK N.

Examiner

Ian N. Moore

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 7-15, filed 5/23/2005, with respect to the rejection(s) of claim(s) 1,21,35 and 41 under 35 USC § 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Forslow (US006608832B2).

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-11, 13-24, 30, 31, and 35-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Forslow (US006608832B2).

Regarding Claims 35, 41 and 42, Forslow discloses a wireless data terminal (see FIG. 9 and 7, Mobile Station 102) comprising:

a data analyzer (see FIG. 7, Bearer selection and QoS parameter mapping section) for identifying whether data transmitted by the terminal is delay sensitive (see FIG. 7 and 9, for circuit switch, CS, for low delay quality of service, audio and video components) or delay insensitive (see FIG. 7 and 9, packet switch, PS, for a best effort quality of service); also see FIG. 4, steps 62, 64, 66; see col. 10, lines 1-15, 22-46; see col. 12, lines 10-34;

a wireless circuit transmission system (see FIG. 7, V.110 modem) for transmitting delay sensitive data (see FIG. 9, CS barrier service data; see col. 12, lines 11-20); and

a wireless packet transmission system (see FIG. 7, GPRS modem) for transmitting delay insensitive data (see FIG. 9, PS barrier service data; see col. 12, lines 20-34); also see col. 14, lines 50 to col. 15, lines 9.

Regarding Claims 1 and 21, the method claims, which have substantially disclosed all the limitations of the respective claim 35 (see methods in FIG. 4 and 8). Therefore, they are subjected to the same rejections.

Regarding Claim 2, Forslow discloses using Internet Protocol packet transmission (see col. 9, lines 49-53; IP or Internet).

Regarding Claims 3, 4 and 36, Forslow discloses establishing one of a wireless circuit switched communication connection, a Personal Communication System connection,

and a radio connection (see FIG. 4, step 64, CS connection; see FIG. 9, mobile station 102 with CS “wireless” radio connection to BSS; see col. 10, lines 1-15,22-46).

Regarding Claim 5, Forslow discloses wherein establishing a wireless circuit switched communication connection includes determining call parameters for establishing the wireless circuit switched communication connection (see col. 9, lines 5-10; see col. 10, lines 1-16; see col. 12, lines 35-55; when establishing a connection, the user must dial a called party phone number, and the connection is determined based upon call parameters such as the called party number and calling party phone numbers, the requested quality of service, channels, time slots, and etc. for CS connection).

Regarding Claim 6, Forslow discloses determining by extracting a call parameter from the data being transmitted (see FIG. 8, CS bearer determining steps 74,76,78,80,82; note that the requested quality parameter information (i.e. flow ID, class, QoS, etc.) are extracted/removed in order to compare with quality parameters such as delay, bucket depth, class, TTL, and/or volume; see col. 12, lines 35 to col. 14, lines 25).

Regarding Claim 7, Forslow discloses at least **one** of identifying a call destination (i.e. when dialing, one must know/call destination phone number) and determining a rate of data transmission (see col. 13, lines 50 to col.14, lines 25; see col. 10, lines 8-12; determining bit rate).

Regarding Claim 8, Forslow discloses connecting the wireless circuit switched communication connection with a PSTN (see FIG. 2, PSTN 38; see col. 2, lines 44-64).

Regarding Claim 9, Forslow discloses connecting the wireless circuit switched communication connection with a Internet (see FIG. 2, IP data network 56 or Internet; see col. 3, lines 25-35; see col. 4, lines 23-25; see col. 15, lines 5-11).

Regarding Claim 10, Forslow discloses wherein connecting the wireless circuit switched communication connection with the Internet includes providing a gateway server (see FIG. 2, a combined system of GPRS support nodes (SGSN 50, & GGSN 54)) operatively between a wireless circuit switched communication network (see FIG. 2, GSM circuit switch network 35) and the Internet (see FIG. 2, IP data network 56); see col. 3, lines 24-65; see col. 14, lines 25-63).

Regarding Claims 11 and 40, Forslow discloses using packet transmission to send data over the Internet (see col. 3, lines 24-34; see col. 10, lines 20-36).

Regarding Claim 13, Forslow discloses wherein the delay sensitive data includes one or more of voice data, video data, and multimedia data (see col. 9, lines 46-50; see col. 10, lines 36-39; voice/audio or video components for CS service).

Regarding Claim 14, Forslow discloses wherein the data being transmitted is multimedia data (see col. 9, lines 39-44; multimedia) comprising a delay sensitive portion (see col. 9, lines 46-49; see col. 10, lines 36-40; audio/voice or video) and a delay insensitive portion (see col. 9, lines 50-54; see col. 10, lines 34-36; data or packet), the delay sensitive portion being transmitted by the wireless communication connection (see FIG. 9, CS connection) and the delay insensitive portion being transmitted by packet transmission (see FIG. 9, PS connection).

Regarding Claim 15, Forslow discloses wherein the data being transmitted is initially packetized (see FIG. 5, 6, and 8, packetizing processes based upon payload/traffic flows/types), each data packet comprising a header and payload (see FIG. 5, packet header and payload), wherein identifying if the data being transmitted is delay sensitive (see FIG. 4, step 60-64, see FIG. 8, step 70,72,84, 86) comprises;

identifying an application identifier (see FIG. 7, RTP, UDP, or TCP) in a respective packet header (see FIG. 5, packet header; see col. 10, lines 54-60, col. 11, lines 55 to see col. 12, lines 7; note that appropriate transport protocol (i.e. RTP, UDP or TCP) is determined/identified from the packet header for various application traffic/payload); and

depending on the application identifier, examining the packet payload (see FIG. 7, Video flow traffic/payload, Audio/voice flow traffic/payload, or conferencing flow traffic/payload; see col. 11, line 55 to see col. 12, lines 10; note that based upon the transport protocol, each payload/traffic type/flow is defined/examined and QoS/bearer selection is performed accordingly).

Regarding Claim 16, Forslow teaches determining if the application identifier corresponds to the User Datagram Protocol (see FIG. 5, UDP in the packet header; col. 10, lines 54-60, col. 11, lines 55 to see col. 12, lines 7; note that determining/identifying if the application transport identifier to carry various application traffic flow is/as UDP, User Datagram Protocol when packetizing).

Regarding claim 17, Forslow teaches examining if the application identifier corresponds to the User Datagram Protocol (see FIG. 5, UDP in the packet header; col. 10, lines 54-60, col. 11, lines 55 to see col. 12, lines 7; note that

determining/identifying/examining if the application transport identifier to carry various application traffic flow is/as UDP, User Datagram Protocol when packetizing).

Regarding claim 18, Forslow teaches identifying if the data packet payload contains voice data. (see FIG. 7, Audio Data application traffic flow; see col. 5, lines 21-30, 45-46; col. 10, lines 35-40; col. 11, lines 55 to col. 12, lines 7; note that identifying/determining/examining if the data application flow/traffic is/as audio/voice payload/traffic when packetizing).

Regarding claim 19, Forslow teaches identifying if the data packet payload contains video data (see FIG. 7, Video Data application traffic flow; see col. 5, lines 21-30, 45-46; col. 10, lines 35-40; col. 11, lines 55 to see col. 12, lines 7; note that identifying/determining/examining if the data application flow/traffic is/as the video payload/traffic).

Regarding claim 20, Forslow further teaches identifying if the data packet payload contains multimedia data (see FIG. 7, Conferencing/multimedia Data application traffic flow; see col. 2, lines 6-10, col. 5, lines 21-30, 45-46; see col. 9, lines 40-42; col. 11, lines 55 to see col. 12, lines 7; note that identifying/determining/examining if the data application flow/traffic is/as multimedia/conference payload/traffic).

Regarding claims 22 and 30, Forslow discloses wherein the first/second node is a wireless data terminal (see FIG. 2, mobile host 12) and the second/first node is on a PSTN (see FIG. 2, note that a phone/node which is on the PSTN 38; see col. 2, lines 15-30, 45-64).

Regarding claims 23 and 31, Forslow discloses wherein delay sensitive data is transmitted between the first/second node and the second/first node by way of a cellular network (see FIG. 2, GSM circuit switch network 35; see col. 2, lines 15-30, 45-64).

Regarding claim 24, Forslow discloses delay insensitive data is transmitted between first node and second node by way of Internet (see FIG. 2, a second node is coupled to ISP/IP network; see col. 3, lines 24-34; see col. 10, lines 20-36).

Regarding Claim 37, Forslow discloses wherein said wireless transmission system comprises a computer peripheral card (see FIG. 2, mobile station 102; see FIG. 7-8, method/process; mobile station must have a computer/processor card).

Regarding Claim 38, Forslow discloses wherein said packet transmission system is constructed and arranged to communicate with a packet data network (see FIG. 2, IP data network 56 or Internet; see col. 3, lines 25-35; see col. 4, lines 23-25; see col. 15, lines 5-11).

Regarding Claim 39, Forslow discloses wherein said packet transmission system is constructed and arranged to communicate with a wireless data network (see FIG. 2, GSM GPRS packet-switch network 51; see col. 14, lines 25 to col. 15, lines 35).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 12,25-29, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forslow in view of Chang (U.S. 6,487,406).

Regarding claim 12, Forslow discloses an Internet and a PSTN (see FIG. 2, PSTN38 and IP network 56). Forslow does not explicitly teach a connection. However, connection PSTN and Internet is well known in the art. In particular, Chang teaches connecting the Internet connection to a PSTN (see FIG. 1, Internet connection to a PSTN 20; see col. 1, lines 35-46).

In view of this, having the system of Forslow and then given the teaching of Chang'406, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Chang, by providing a connection between Internet and PSTN as taught by Chang. The motivation to combine is to obtain the advantages/benefits taught by Chang since Chang states at col. 2, line 16-24 that such modification would provide the wireless Internet communication, which can easily operate in conjunction with emerging and existing technologies by connection to the Internet.

Regarding claims 25 and 32, Forslow discloses wherein the first/second node is a wireless data terminal (see FIG. 2, mobile host 12) and the second/first node (see FIG. 2, a second node is coupled to ISP/IP network; see col. 3, lines 24-34; see col. 10, lines 20-36).

Forslow does not explicitly disclose second/first node is on the Internet. However, the above-mentioned claimed limitations are well known in the art. In particular, Chang teaches second/first node (see FIG. 2, Host 36) is on the Internet (see FIG. 2, Internet 34; see col. 1, line 30-67).

In view of this, having the system of Forslow and then given the teaching of Chang, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Forslow, by providing a node connection to the Internet, as taught by Chang. The motivation to combine is to obtain the advantages/benefits taught by Chang since Chang states at col. 2, line 16-24 that such modification would provide the wireless Internet communication, which can easily operate in conjunction with emerging and existing technologies by connection to the Internet

Regarding claim 26, Forslow discloses wherein delay insensitive data is transmitted between the first node and the second node by way of a wireless data network (see FIG. 2, GSM GPRS packet-switch network 51; see col. 14, lines 25 to col. 15, lines 35). Also, Chang further teaches wherein delay insensitive data is transmitted between the first node and the second node by way of a wireless data network (see FIG. 2, a wireless data network consists of MS 18, BS 16, BSC 14, GR 32; see col. 4, lines 14-19).

Regarding claim 27, Forslow discloses a gateway server (see FIG. 2, a combined system of GPRS support nodes (SGSN 50 & GGSN 54)) between the wireless data network (see FIG. 2, GSM circuit switch network 35) and the Internet (see FIG. 2, IP data network 56); see col. 3, lines 24-65; see col. 14, lines 25-63). Also, Chang further teaches providing a gateway server (see FIG. 2, Gateway Router GR 32) between the wireless data network and the Internet (see FIG. 2, a gateway router connects the wireless data network and Internet 34; see col. 4, lines 14-19).

Regarding claims 28 and 33, Forslow discloses wherein delay sensitive data is transmitted between the first node and the second node (see col. 2, lines 15-30, 45-64).

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Chang further teaches wherein delay sensitive data is transmitted between the first node (see FIG. 1, MS 18) and the second node (see FIG. 1, a node that connects to Internet, i.e. see FIG. 2, Host 36) by way of a wireless cellular network (see FIG. 1, a wireless cellular network consists of MS 18, BS 16, BSC 14, MSC 12, IWF 24; see col. 1, lines 30-46).

In view of this, having the system of Forslow and then given the teaching of Chang, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Forslow, by utilizing a wireless cellular network to connect to the Internet, as taught by Chang, for the same motivation as stated above in Claim 25.

Regarding claims 29 and 34, Forslow discloses a gateway server (see FIG. 2, a combined system of GPRS support nodes (SGSN 50 & GGSN 54)) between the cellular network (see FIG. 2, GSM circuit switch network 35) and the Internet (see FIG. 2, IP data network 56); see col. 3, lines 24-65; see col. 14, lines 25-63). Chang'406 further teaches providing a gateway server (see FIG. 1, IWF 24) between the cellular network and the Internet (see FIG. 1, Interworking Function Unit is the server that connects between Internet and the wireless circuit network comprising MSC 12; see col. 1, lines 30-67).

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 9:00 AM - 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600